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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,907	09/22/2003	Sung Oh II	2336-203	6802

7590

07/22/2005

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EXAMINER

RONESI, VICKEY M

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/664,907	Applicant(s) OH, SUNG	
	Examiner Vickey Ronesi	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1714

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of Group I, claims 1-5 in the reply filed on 7/8/2005 is acknowledged. The traversal is on the ground(s) that the examiner has failed to demonstrate why a casting process is a materially different process than extrusion or why a biaxially-stretched film is materially different from an electronic device. This is not found persuasive because the examiner has already shown in paragraphs 2-5 of Office Action mailed 6/9/2005 that, *prima facie*, that they are different. Applicants' attention is drawn to MPEP 803.01 which states that the "*prima facie* showing may be rebutted by appropriate showings or evidence by the applicant." No such showing has yet been made by applicants, only conclusory statements have been made.

The requirement is still deemed proper and is therefore made FINAL.

### *Drawings*

2. The drawings are objected to because it has not been made clear what the drawings represent. For example, in Figure 2, since the "circles" and "lines" are not labeled, it is not known what they represent. In addition, the "oval" with functional groups causes confusion since it is not made clear if whether the "oval" represents magnified scale of the green sheet or if there actually is only one relatively large layer of the polymer composition of the present claimed invention.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

Art Unit: 1714

sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

3. Claim 3 is objected to because of the following informalities: the recitation of "the polymer" in line 2 of the claim causes confusions since it not immediately clear to what polymer in present claim 1 is referred. Moreover, "polyolefins" should be replaced with "a polyolefin" in order to be grammatically correct.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1714

4. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1 and 2, there is no basis for the average molecular weight, i.e., is it weight-average molecular weight or number-average molecular weight? In addition, the “~” symbol causes confusion since it is not made what “~” is intended to encompass, whether or not the range is approximate or exact. No new matter should be inserted when amending claims.

With respect to claims 3-5, they are rejected for being dependent on a rejected claim.

### *Claim Rejections - 35 USC § 102/103*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 4, and 5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Simpson (US 4,379,109).

Art Unit: 1714

Simpson discloses composition (col. 3, lines 44-55) comprising 15-85 vol. % ceramic powder (col. 2, lines 50-63), 5-70 vol. % polyolefin binder having a high molecular weight of at least 150,000 (col. 2, line 64 to col. 3, line 32), 10-70 vol. % plasticizer (i.e., solvent) (col. 3, lines 32-43), and 0.5-10 wt % of a thickening agent such as polyvinyl alcohols and acetate and acrylic copolymers (col. 4, line 62 to col. 5, line 5). While the amounts are in vol. %, it is the examiner's position that it is inherent that broadly disclosed vol. % amounts overlap with the presently claimed amounts in wt %, absent evidence to the contrary. Note the Example in col. 6 where 7.5 wt % of polyethylene is utilized.

In light of the above, it is clear that Simpson anticipates the presently cited claims.

To the extent that Simpson does not expressly disclose a composition with the presently claimed amounts in wt %, it is considered that it would have been obvious to one of ordinary skill in the art to optimize the disclosure of Simpson to obtain a composition with amounts of ingredients in wt % that overlap with those in the presently cited claims.

***Claim Rejections - 35 USC § 103***

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson (US 4,379,109).

The discussion with respect to Simpson in paragraph 5 above is incorporated here by reference.

Simpson discloses that, depending on the desired physical properties of the final product, the high molecular weight polyethylene can be blended with standard lower molecular weight polyethylene, to the extent that a too low overall molecular weight of the blend and consequent

Art Unit: 1714

brittleness of composition are avoided (col. 3, lines 10-15); however, Simpson does not disclose specific amounts of the lower molecular weight polyethylene.

Even so, it is the examiner's position that the amount of lower molecular weight polyethylene is a result effective variable because changing them will clearly affect the type of product obtained. See MPEP § 2144.05 (B). Case law holds that "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In view of this, it would have been obvious to one of ordinary skill in the art to utilize appropriate amount of polyethylene, including those within the scope of the present claims, so as to produce desired end results and thereby arrive at the presently cited claim.

#### ***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

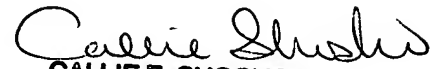
Art Unit: 1714 .

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/19/2005

vr

A handwritten signature, possibly reading 'vr', is written in black ink.

  
**CALLIE E. SHOSHO**  
**PRIMARY EXAMINER**